

Inside Tech Transfer

Special IOR '98 Edition

A "Special Edition" for the Eleventh SPE/DOE Improved Oil Recovery Symposium



Tulsa, home of the oldest SPE Section, hosts IOR '98

Tulsa has been the host for the Improved Oil Recovery Symposium since 1969. This year, Tulsa Mayor **Susan Savage** opens the three-day symposium with welcoming remarks to an international audience representing 22 countries. A range of technical topics will be covered in the 105 papers presented in 15 technical sessions during April 19-22.

IOR Technology-Global Impact Mayor Susan Savage Welcomes International Audience to Tulsa

The format for IOR '98 is similar to the first symposium initiated in April 1969 by the SPE MidContinent Section. **Frank Eby**, President of Staghorn Resources, will address attendees at the Monday Luncheon, and an exhibition which showcases new petroleum industry equipment and techniques now includes the Exhibitor Technology Update Series. And for the first time, an introductory oil and gas course has been added to the program for area science teachers.

The SPE MidContinent Section started the Enhanced Oil Recovery Symposium so petroleum professionals from around the world could gather, exchange technical information, and present the results from field and laboratory projects. DOE has co-sponsored the symposium since 1972. According to IOR chairperson **Betty Felber**, "The perspectives of government and the oil industry promote cost-effective IOR technology, a critical element for oil producers faced with maintaining a viable global oil industry."

SPE President Headlines IOR '98

DeAnn Craig, 1998 SPE president, addresses delegates at IOR '98 Monday morning, April 20 during the opening session. Craig has been an active member of the Society, holding numerous offices in the Denver Petroleum section, including chairperson, and as director of the Canadian Region and at large director on the SPE Board. She has served on the Society's Executive Committee in addition to serving as chair of the Board Committee on Membership and Professional Activities.



DeAnn Craig, SPE President

Craig has served as chairperson of the Society's Continuing Education Committee and as a

member of various SPE committees including the Oil & Gas Reserves, Forum Series, and Editorial Review. Craig is a recipient (1987) of the Society's Young Member Outstanding Service Award. From 1995 to 1997, Craig was chairperson of two major SPE task force groups involving work with the World Petroleum Congress and the Society's nominations and elections procedures. Craig works on technical and legislative issues in Washington, D.C., for Phillips Petroleum Company.

IOR '98 at <http://www.npto.doe.gov/ior.html>

IOR '98 Plenary Session Speakers

<i>Moderator</i>	Joe Warren, Journal of Petroleum Technology
<i>U.S. Government</i>	Robert Kripowicz, Principal Deputy Assistant Secretary for Fossil Energy, U.S. Department of Energy, Washington, D.C.
<i>Service Companies</i>	E. J. "Jed" DiPaolo, Senior Vice-President, Global Business Development, Halliburton Energy Services
<i>Worldview</i>	Guntis Moritis, Production Editor, Oil & Gas Journal
<i>Independents</i>	Leo Schrider, Vice-Chairman, Petroleum Technology Transfer Council
<i>Banking</i>	Amiel David, Manager of Engineering, First Union Corporation
<i>International</i>	Roberto Mezzomo, Manager, Strategic Program on Advanced Oil Recovery R&D Center, Petrobras S.A.
<i>Majors</i>	Douglas Lanier, President, Chevron Petroleum Technology Company

Exhibitor Technology Update Series

During the Exhibitor Technology Update Series, manufacturers and vendors demonstrate innovative, successful technologies for domestic and global improved oil recovery strategies:

Monday, April 20

- 1:00-1:45 *Drilling & Production Testing Facility*, Amoco Corporation
- 2:00-2:45 *Determining the Performance of Waterflood & Gas Injection Projects with Tracers*, Tracer Technologies International, Inc.
- 3:00-3:45 *Reservoir Optimized Completions*, Baker Oil Tools
- 4:00-4:45 *TBD*, Halliburton Energy Services

Tuesday, April 21

- 8:00-8:45 *Polymers & Crosslinkers for Conformance Control and Stimulation*, Drilling Specialties Company
- 9:00-9:45 *Improving Oil & Gas Production by Controlling "Bad Water"*, Dowell, a division of Schlumberger Technologies
- 10:00-10:45 *Case Studies Illustrating the Management System Use to Optimize Production From ESP and Gas Lift Fields*, Camco Engineering Optimization Resources
- 11:00-11:45 *Two-Phase Flow Metering*, Barton Instruments
- 1:00-1:45 *Problem Solving Applications of Polymer Gels*, Polymer Systems Inc.
- 2:00-2:45 *Unique Approach/Significant Accomplishments/Success Stories*, Petroleum Technology Transfer Council
- 3:00-3:45 *Control Water—Improve Oil Recovery*, Tiorco, Inc.
- 4:00-4:45 *Downhole Video Camera Use for Fluid Entry Surveys in Rod Pump Wells*, DHV International Inc.

Wednesday, April 22

- 8:00-8:45 *Use of CT and MR Imaging Techniques for Designing Improved Oil Recovery Methods*, BDM Petroleum Technologies
- 9:00-9:45 *An Overview of the Frac Explore Software*, U.S. Department of Energy, National Petroleum Technology Office
- 10:00-10:45 *Oklahoma's Class I Fluvial Dominated Project*, U.S. Department of Energy, National Petroleum Technology Office
- 11:00-11:45 *Telemetric Systems for Production*, Multi Products Co.

IOR '98 Recognizes Pioneers

History in the Making is the theme of Monday's Recognition Luncheon honoring four IOR pioneers:

William E. Brigham, Stanford University, Department of Petroleum Engineering, for pioneering contributions to processes for recovering heavy oil and advancing many aspects of reservoir management applicable to IOR processes.

George Hirasaki, Rice University, Department of Chemical Engineering (retired from Shell), for advancing the theoretical understanding of the mechanics of IOR processes, with emphasis on the surfactant polymer flood process and the effects of wettability and interfacial and film phenomena.

C. Robert Fast, Amoco Production Co., Research Depart-

ment (retired), for developing the hydraulic fracturing process and its applications.

Thomas K. Perkins, ARCO Research and Technical Service Dept. (retired), for pioneering contributions in miscible displacement, hydraulic fracturing, completions in permafrost, and pipeline drag reduction.

Keynote speaker, **Frank Eby**, President of Staghorn Resources, retells the "Secrets of Sherwood Forest." In the darkest days of World War II when German submarines were trying to strangle Britain's petroleum lifeline from America, a group of Oklahoma oilmen braved the dangerous Atlantic crossing to bring their expertise to a "top secret" project to drill for oil in the heart of Britain.



Frank Eby, President Staghorn Resources

The oil they found in Sherwood Forest of Robin Hood fame gave Britain a stable oil supply to augment oil shipped by tanker from America through U-boat-infested seas. Eby directed the campaign of the International Society of the Energy Advocates to remember this heroic contribution by Oklahoma oilmen to eventual Allied victory in Europe.

BDM Advances DOE-Sponsored R&D

Technical session presentations include five papers and one poster session selected from BDM Petroleum Technologies and BDM-Oklahoma. The presentations represent DOE-sponsored work performed for the National Petroleum Technology Office.

Tuesday, April 21 Poster Session

39661 D.B. Evans, BDM Petroleum Technologies, *Improved Crude Oil Recovery by Alkaline Flooding Enhanced with Microbial Hydrocarbon Oxidation*

Tuesday, April 21

39632 C.G. Zheng, BDM Petroleum Technologies, *Effects of Polymer Adsorption and Flow Behavior on Two-Phase Flow in Porous Media*

Wednesday, April 22

39668 M.P. Madden, BDM-Oklahoma, *Effective Reservoir Management with Three Case Studies*

39680 T. Zhu, BDM Petroleum Technologies, *Foams for Mobility Control and Improved Sweep Efficiency in Gas Flooding*

39665 L.E. Safley, BDM Petroleum Technologies, *Integration of Geological and Engineering Data to Improve Waterflood Sweep Efficiency in Citronelle Field, Mobile County, Alabama*

39670 J.A. Parli, BDM Petroleum Technologies, *Transport and Stability of Polymer-Producing Bacteria in Porous Media*

IOR '98 Steering Committee Members



IOR '98 Steering Committee, front row, left to right, Lowell Smith, Amit Sarker, Bob McCluskey, Jana Smith, Betty Felber. Back row, left to right, Andrew Falls, Pat Pardee, Ken Ogelsby, Tom Wesson, Randy Seright, Doug Norton, Buck Walsh. Not shown: Tom Engler, Dan Ferguson, Judy Kokesh, Ovadia Shoham, Ralph Veatch.

IOR '98 Program Committee Members



IOR '98 Program Committee, front row, left to right, Lance Cole, Malcom Pitts, Greg Hild, Martin Blunt, Jerry Casteel, Rhonda Lindsey. Back row, left to right, Chun Hun, Bill Rossen, Randy Seright, Jose Mogollon, Rod Tillman, David Stevens, Bob Lemmon. Not shown: David Olsen, Tad Patek.

**U. S. Department of Energy
National Petroleum
Technology Office
One West Third Street
Williams Center Tower One
Fourteenth Floor
Tulsa, Oklahoma 74103
918-699-2000**

IOR '98 Continuing Education Program

Short courses offered will be held Saturday, April 18, and Sunday, April 19. All courses are presented at the Doubletree Hotel Downtown from 8:00 am to 5:00 pm. Contact the IOR '98 Registrar at 918-681-3255 for short course information and registration.

Saturday, April 18

- s ***Reservoir Aspects of Horizontal Wells***, Sada Joshi, Joshi Technologies
- s ***Streamline Simulation: Theory & Practice***, Akhil Datta-Gupta, Texas A&M University
- s ***Water Shutoff***, Randy Seright, New Mexico Petroleum Recovery Research Center
- s ***Thermal and Heavy Oil Recovery Methods***, Don Mims, Craig Pauley, Bill Richardson, Texaco

Sunday, April 19

- s ***Reservoir Characterization: From the Laboratory to the Field***, Larry Lake, University of Texas
- s ***Gas Injection Processes***, Franklin M. Orr, Stanford University
- s ***Upscaling for Flow in Heterogeneous Porous Media***, Ekrem Kasap, Geoquest

IOR '98 Introduces Science Teachers to Oil & Gas Exploration

An Introduction to Oil and Gas scheduled during IOR '98 will provide middle and high school teachers from Tulsa and surrounding schools with an awareness of America's dependence on oil-based products and an understanding of basic earth science concepts as applied to the exploration of oil

and gas. The one-day teacher training has been added to the symposium because of the SPE and DOE emphasis on education. Judy Kokesh, Education Coordinator for BDM-Oklahoma, will conduct the training adopted from the Denver Earth Science Project.

Register Now for IOR '98

Contact SCG, Inc.
phone 918-586-7275, fax 918-586-7277,
email ior@scgincorp.com

Contact Jana Smith, Press Relations
phone 918-699-2088, fax 918-699-2005,
email jsmith@npto.doe.gov